# Handling Vaccines



Bill Halfman, Beef Outreach Specialist Extension Educators Sandy Stuttgen, Carolyn Ihde, and Adam Hartfiel

### Modified Live Vaccine (MLV) OR Killed Vaccines (KV)

At all times – storage and chute side: Keep cold but not frozen Keep out of sunlight

- Follow label instructions including withdrawal times
- Don't use expired products
- Gently and thoroughly mix just prior to use
- Use a sterile needle to draw from the bottle



#### Chute side:

One Product per Labeled Syringe Inject in clean area of the injection zone Wipe syringe exterior as needed DO NOT Rinse Syringe with any liquid

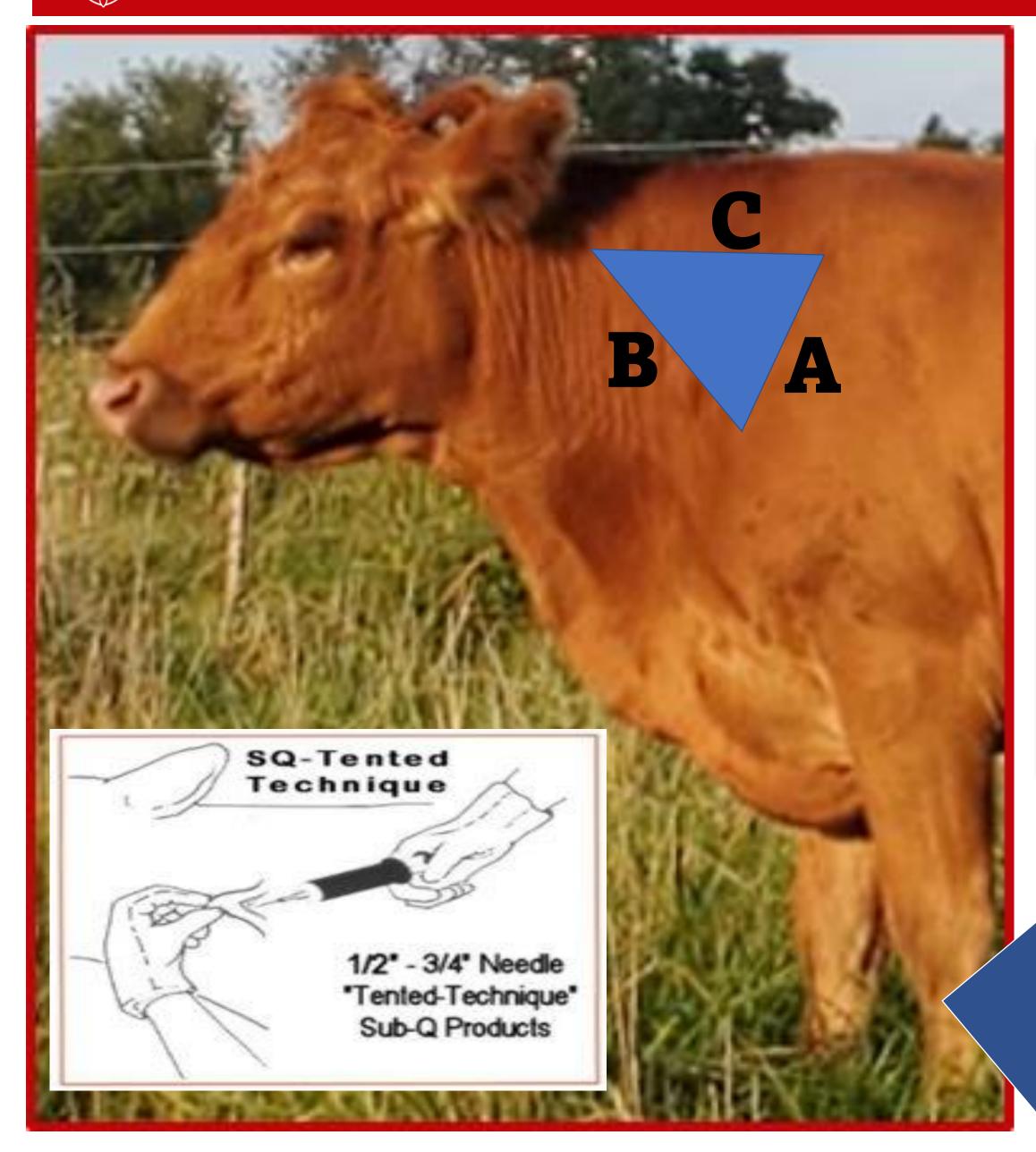
- Discard unused product
  - MLV ineffective beyond an hour of being mixed
  - KV may be stored after opening IF NOTHING, but a sterile needle, pierced the stopper

Citation: Beef Quality Assurance National Manual. 2019 Cattlemen's Beef Board and National Cattlemen's Beef Association

# Injection Triangle



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### Injection Triangle

A - Ahead of point of shoulder

B – Above the vertebrae

C - Below Nuchal Ligament

34 to 1 inch needle for IM
1/2 to 34 inch needle for SQ



- Select low dosing products
- Follow label directions including withdrawal times
- SQ products preferred over IM
- 10 cc or less per IM injection site
- Space multiple injections 4 inches (hands width) apart
- When administering two products on one side of the neck, place the IM above the SQ
- May need to use both sides of the neck

Citation: Beef Quality Assurance National Manual. 2019 Cattlemen's Beef Board and National Cattlemen's Beef Association

# Multi-use Syringe Care



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Cleaned

Heat Sanitized

Stored

### Cleaned Immediately After Use

- All internal components, tubing, vent spikes
- Taken apart if possible or repeated rinsing
- Use ONLY hot PURIFIED water no soap, no disinfectants

## Heat to Sanitize Clean Syringes

Options include:

- Boiling
- Microwave



Store Clean Sanitized Syringes in Sealed Plastic Bags in the Freezer

#### Citations:

- Beef Quality Assurance National Manual. 2019 Cattlemen's Beef Board and National Cattlemen's Beef Association.
- Animal Health Equipment Management. Veterinary Clinics of North America: Food Animal Practice. Vol 31, Issue 2, July 2015, pages 259-267. https://doi.org/10.1016/j.cvfa.2015.03.009